



LIFE SAFETY & INCIDENT MANAGEMENT

FireShield Plus

Conventional Fire Alarm Control Panels

7165-1657:
0102**FDNY**
COA 6019

Overview

The FireShield Plus fire alarm family consists of 5 and 10 zone conventional fire alarm control panels, an integrated DACT/Dialer, serial annunciator modules, and serial remote relay modules. All of these components are microprocessor-controlled. The FireShield Plus family is ideal for both new and retrofit installations alike.

FireShield Plus incorporates features designed to simplify installation, operation and maintenance. These include front panel programming, one person walk testing, and selectable IDC and NAC types. In addition, when used with EDWARDS *CleanMe*®-compatible smoke detectors, FireShield Plus provides analog type features such as remote maintenance alert and automatic drift compensation that reduce false alarms and simplify maintenance calls.

FSP502 and FSP1004 panels support Class A operation by combining pairs of on-board initiating circuits (IDCs) or notification circuits (NACs) to provide the necessary Class A circuits. For example, the FSP1004 comes factory set to support 10 Class B IDCs and four NACs. But it can be field-configured to provide five Class A IDCs, no Class B IDCs, and two Class A NACs – or any other combination of circuits that fall within the circuit-pairing parameters.

	FSP1004	FSP502
Class B IDCs	Up to 10	Up to 5
Class A IDCs	Up to 5	Up to 2
Class B NACs	Up to 4	Up to 2
Class A NACs	Up to 2	1
NAC Power	3.5 amps*	3.5 amps
Auxiliary power	0.5 amps	0.5 amps

Note: Class A operation will reduce the number of available Class B IDCs and/or NACs, depending on the panel configuration. See Specifications on page 5 for details.

*Expandable to 7.0 amps

Standard Features

- Available in 5 and 10 IDC models
- IDC or NAC pairs convertible to single Class A circuits (10 and 5 IDC panels only)
- *CleanMe*® provides remote annunciation if a detector drifts out of UL/ULC limits reducing the chance of a false alarm
- Combination Waterflow and Supervisory IDCs reduces wire and zone counts
- NACs programmable by zone and individually selectable for Genesis, continuous, temporal outputs, or coded
- Front panel programmable simplifies installation and servicing
- Optional fully integrated DACT/Dialer for PC programming
- Genesis option allows precision synchronization and audible silence over two wires without additional modules
- On-board relays for Alarm, Supervisory and Trouble
- Optional serial bus relay modules are programmable for common or zone activation
- Optional serial bus remote annunciator family
- One person walk-test (audible or silent)
- Expandable power supply on 10 IDC panel reduces booster power costs
- Trim ring available for semi-flush mounting
- Supports 2M, "EC", 6200, 400, 500 and 700 series detectors

Application

FireShield Plus provides smoke and fire detection, occupant notification and off-premises signaling for small- to medium-sized buildings.

Each IDC can be configured for either Class B or Class A operation and one of eight operating modes:

- Alarm –with or without smoke detector verification including discrimination of contact devices
- Waterflow Alarm;
- Waterflow Alarm/Supervisory (Combination IDC);
- Supervisory (Latching/non-latching);
- Monitor (non alarm or supervisory)
- Signal Silence
- Drill
- Cross zoning

NACs may also be configured for either Class B or Class A operation. Additionally, NACs can be individually configured for one of six outputs. These are Genesis, Genesis (A/V silenceable), Continuous, Temporal, Coded, and City Tie. The Genesis selection allows independent horn control over two wires and provides precision synchronization for Genesis devices, all without the need for a Genesis Signal Master accessory.

When configured for Genesis notification appliances, FireShield Plus's Alarm Silence function will silence connected Genesis audible appliances but Genesis strobes will remain active until the panel is reset. When Genesis Mode is selected, both the horns and strobes on Genesis and Enhanced Integrity notification appliances will be synchronized across all NACs.

Note: zones may be selected for either latching or non-latching operation.

Detectors with intelligent features at a conventional price

When combined with EDWARDS *CleanMe*®-compatible smoke detectors, FireShield Plus provides intelligent features at a conventional price. If a *CleanMe*® detector drifts out of the UL/ULC sensitivity range, EDWARDS's patented remote maintenance reporting sends an alert to the FireShield Plus control panel. This feature reduces the chance of a false alarm and simplifies service calls. In addition, *CleanMe*®-compatible smoke detectors have built-in drift compensation that extends the time between cleanings. If cleaning is ever necessary, it is literally a snap with EDWARDS's exclusive replaceable optical chamber.



Panel LED Display

The following system LEDs display the panel's status:

- *Alarm* – panel is in the alarm state;
- *Trouble* – panel is in the trouble state;
- *Supervisory* – panel is in the supervisory state;
- *Power* – indicates the status of the AC power source;
- *Disable* – indicates when any IDC, NAC, relay or the DACT is disabled;
- *Annunciator Trouble* – indicates trouble on the remote annunciator bus;
- *Battery Trouble* – indicates battery or charging problems;
- *Ground Fault* – indicates a short between any panel circuit and ground;
- *Walk Test* – indicates that one or more IDCs are in the walk test mode;
- *Alarms Silenced* – indicates that the panel is in the alarm state with one or more NACs silenced.
- *Waterflow* – indicates that one or more circuits have detected an active waterflow switch.
- *Service Detector* – indicates the presence of a dirty detector.
- *Remote Disconnect* – indicates off site communication has been disabled.

Each IDC has a disable switch and three LEDs:

- Alarm – *red* – indicates that the IDC is in the alarm state;
- Trouble – *yellow* – indicates that the IDC is in the trouble state or is disabled (when flashing);
- Supervisory/Monitor – *yellow* – indicates that the IDC is in the supervisory state or the monitor state (when flashing).

Each NAC also has a disable switch and a trouble/disable LED.

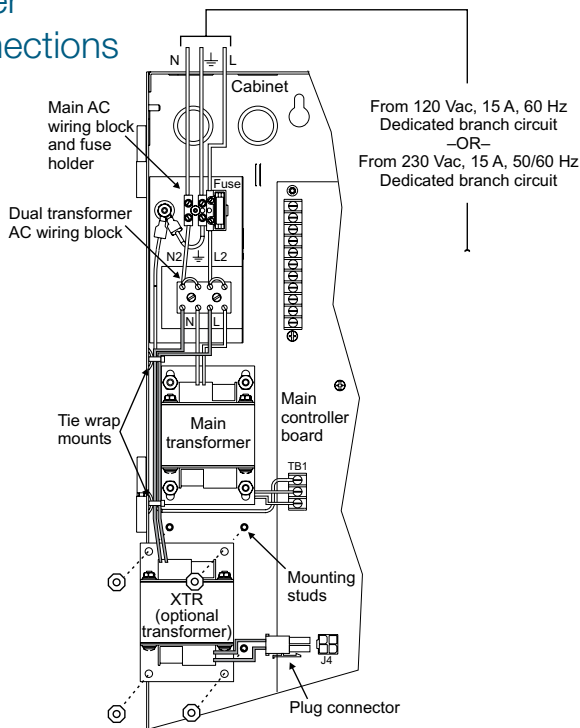
Status indication with the DACT/Dialer installed

The dialer's LCD display provides two lines x 16 characters of text. For programming, the top line displays the programming step and the lower line displays the selected option. All system events are displayed on the LCD with custom zone messages. During normal operation, the LCD will display any off-normal condition present in the panel.

IP and Cellular Communications

Several popular third-party IP/Cellular communicators have been tested with the FSP conventional control panels and are compatibility listed to UL864. The IP/Cellular communicators meet NFPA72 2013 edition requirements for sole or secondary transmission paths. Using IP/Cellular communicators can reduce the cost of ownership by eliminating POTS lines. Please see the FSP conventional control panel compatibility documentation part number 3101019-EN for a full list of compatible communicators.

Power Connections



DACT/Dialer



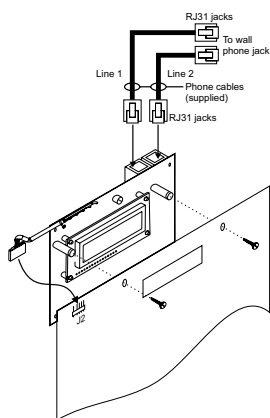
The DACT/Dialer installs behind the front panel display.

The optional DACT/Dialer is a multi-function module that provides communications, modem capability, and LCD display functions. Its primary function is as a Digital Alarm Communicator Transmitter (DACT). As a DACT, it transmits event messages to a Digital Alarm Communicator Receiver (DACR) at a monitoring facility. The monitoring facility then notifies the fire department and other responsible parties of the event. Programmable options include single or dual line operation, and split or dual reporting to two DACRs.

The DACT module can also be used as a modem to connect the panel to both local and remote computers for uploading and downloading of configuration data (programming), panel status and event history. For security, the modem can be configured to accept programming on incoming calls or it can be required to call a preprogrammed number before accepting downloads and sending uploads.

The DACT module can be configured to work as all of the above, or as only an LCD display or LCD display and modem.

Note: All panel versions are available with factory installed DACT. See order table for ordering information.



Options

Off-premise communication

A fully integrated FireShield Plus DACT/dialer is available for reporting events to a monitoring facility. The DACT also supports uploading or downloading of system configuration, status and event history. The DACT is programmable for either single or dual line operation. It also supports split and dual reporting for two digital alarm receivers.

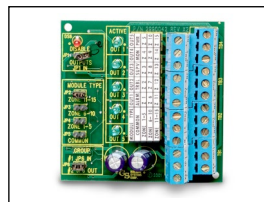
The DACT brings additional features to the panel including a 32-character alphanumeric LCD display, local or remote PC programming and an event history log.

Remote Annunciators and Relays

The serial bus standard on all FireShield Plus models is another installation time-saver. This circuit allows the connection of Remote System Indicators (FSRSI), Remote Zone Indicators (FSRZI-A, FSRZI-SA) and Remote Relay Modules (FSRRM24) over a four-wire (data and power) circuit. Annunciator and relay modules can be installed up to 1,000 feet from the panel on 18-gauge wire.

Modules are also available for City Tie (CTM) and Reverse Polarity (RPM) connections.

Remote Relay Module



The Remote Relay Module mounts on a plastic track inside an MFC-A cabinet.

The Remote Relay Module (FSRRM24) is one component of the system that sets FireShield Plus apart from other panels in its class. This module has five Form C relays rated at 1 amp each. It can be configured to function in either a zone relay mode or a common system mode.

When configured in the zone relay mode, relays energize when the associated IDC is active. The module can be configured for activation by IDCs 1 through 5 or IDCs 6 through 10. One relay is automatically associated with each IDC.

When configured in the common system mode, relays energize or de-energize when the panel changes state. One relay is available for each of the following functions: Alarm, Supervisory, Trouble, Power Loss, Monitor.

The FSRRM24 mounts on a plastic snap track and can be installed in an MFC-A or other listed fire alarm enclosure. The panel will support two RRM's of each configuration for a total of six on the 10-zone panel.

